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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/688,391	10/17/2003	Louis Bellafiore	P6809	1302

7590 03/18/2005

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EXAMINER	
VON BUHR, MARIA N	

ART UNIT	PAPER NUMBER
2125	

DATE MAILED: 03/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/688,391	BELLAFIORE ET AL.	
	Examiner	Art Unit	
	Maria N. Von Buhr	2125	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 October 2003 and 06 February 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *17 October 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *02062004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-20 are pending in this application.

2. Examiner acknowledges receipt of Applicant's information disclosure statement, received 06 February 2004, with accompanying reference copies, which have been taken into consideration for this Office action.

3. The following is a quotation of the second paragraph of 35 U.S.C. §112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which Applicant regards as his invention.

4. Claims 18-20 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. In particular, there is no instantly claimed support for the limitation "wherein the blending is accomplished to 0.4% or better accuracy" (claim 18) nor for "adjusting the proportioning submodule based upon the detected characteristic to within 0.4% of a predetermined value" (claim 19). The limitations have been presented as mere statements of desired result, without more, wherein the other limitations of the claims do not necessitate accomplishment of this desired result. Therefore, the metes and bounds of the claims are unclear, with regard to these limitations.

5. The following is a quotation of the first paragraph of 35 U.S.C. §112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 18-20 are rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement and as failing to comply with the enablement requirement. The claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Also, the claims contain subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. In this regard, the specification provides no support for the limitations "wherein the blending is accomplished to 0.4% or better accuracy" (claim 18) nor for

"adjusting the proportioning submodule based upon the detected characteristic to within 0.4% of a predetermined value" (claim 19). There is nothing in the specification which necessarily results in such accuracy ranges.

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. §102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by Applicant for a patent.
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by Applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by Applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1, 4-8, 11, 15 and 17 are rejected under 35 U.S.C. §102(b) as being clearly anticipated by Collins (U.S. Patent No. 6,161,060), which discloses an "octane sensitive dispenser blending system."

Collins discloses an "octane sensitive blending dispenser for fluids, particularly for fuel dispensers. The dispenser controls component pumps according to octane data measured by octane meters. In one form of the invention octane measurements are taken within the input lines connected to the dispenser from fluid storage tanks. Control of the component pumps is accomplished by determining the difference between the desired blend octane and the observed blend octane and adjusting the pumps so as to more closely blend the desired fluid" (see the abstract). Also, see at least, Figs. 1 and 2; col. 3, line 23 - col. 4, line 46.

9. Claims 1, 4-7, 10, 14, 16 and 17 are rejected under 35 U.S.C. §102(e) as being clearly anticipated by Lemke (U.S. Patent No. 6,796,703), which discloses a "conductivity feedback control system for slurry bending."

Lemke discloses "a process and system that utilizes conductivity measurements during mixing of chemical components to provide a slurry having a solids content within a qualification range. That is, by providing a reference conductivity value indicative of when a sufficient amount of at least two chemicals are combined and by monitoring conductivity while the chemicals are combined, the process and system of

the present invention are able to provide a slurry having a solids content within a qualification range" (see the abstract). Also, see at least, Figs. 1, 4 and 6-9, with accompanying text; col. 2, lines 33-60; col. 3, line 1 - col. 4, line 10; col. 4, line 66 - col. 5, line 35.

10. Claims 1, 6-9, 11, 14, 16 and 17 are rejected under 35 U.S.C. §102(e) as being clearly anticipated by Fulton et al. (U.S. Patent Application Publication No. 2004/0102380), which discloses a "method for continuous, automated blending of solutions from acids and bases."

Fulton et al. disclose a method "to process, purify and/or produce biopharmaceuticals or other products involving automated blending of pH buffered solutions from water and common stocks of concentrated acids and bases, and other components. This approach reduces the cost and complexity of the solution preparation systems required for producing these solutions under aseptic or sterile conditions, and reduces the material costs of the solutions themselves. This approach is particularly beneficial to use with continuously-produced feedstocks and with continuous separation operations" (see the abstract). Also, see at least, Figs. 1-4 and 10, with accompanying text; paragraphs 0003 and 0021-0025.

11. The following is a quotation of 35 U.S.C. §103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

12. Claim 12 is rejected under 35 U.S.C. §103(a) as being unpatentable over either Collins (U.S. Patent No. 6,161,060), Lemke (U.S. Patent No. 6,796,703) or Fulton et al. (U.S. Patent Application Publication No. 2004/0102380), as applied to claim 1 above, further in view of either Bell et al. (U.S. Patent No. 5,332,145) or Stewart et al. (U.S. Patent No. 4,013,413), both of which teach the well-known use of bubble traps in liquid processing, for the well-known purpose of removing bubbles from liquids. See at least, col. 3, line 25 - col. 4, line 7 of Bell et al., and col. 3, lines 9-30 of Stewart et al. It would have been obvious, to one having ordinary skill in the art, at the time the instant invention was made, to utilize such a bubble trap in the systems of Collins, Lemke and Fulton et al., because it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

13. Claim 13 is rejected under 35 U.S.C. §103(a) as being unpatentable over either Collins (U.S. Patent No. 6,161,060), Lemke (U.S. Patent No. 6,796,703) or Fulton et al. (U.S. Patent Application Publication No. 2004/0102380), as applied to claim 1 above, further in view of either Houck et al. (U.S. Patent No. 5,954,954) or Gehrlein et al. (U.S. Patent Application Publication No. 2004/0019462), each of which disclose the well-known use of ultraviolet sensors for detecting the characteristics of a sample. See at least, col. 7, lines 48-64 and col. 27, lines 31-55 of Houck et al., and the abstract and paragraph 0117 of Gehrlein et al. It would have been obvious, to one having ordinary skill in the art, at the time the instant invention was made, to utilize such sensors in the systems of Collins, Lemke and Fulton et al., because it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

14. Claims 18-20 are rejected under 35 U.S.C. §103(a) as being unpatentable over either Collins (U.S. Patent No. 6,161,060), Lemke (U.S. Patent No. 6,796,703) or Fulton et al. (U.S. Patent Application Publication No. 2004/0102380), similarly as applied to claim 17 above, further in view of the following.

In this regard, each of Collins, Lemke and Fulton et al. disclose the instantly claimed invention, except for "wherein the blending is accomplished to 0.4% or better accuracy" (claim 18) and "adjusting the proportioning submodule based upon the detected characteristic to within 0.4% of a predetermined value" (claim 19). It would have been obvious to one having ordinary skill in the art, at the time the instant invention was made, to find such ranges through routine experimentation, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

15. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. §103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR §1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. §103(c) and potential 35 U.S.C. §102(e), (f) or (g) prior art under 35 U.S.C. §103(a).

16. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure. Applicant is advised to carefully review the cited art, as evidence of the state of the art, in preparation for responding to this Office action.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maria N. Von Buhr whose telephone number is 571-272-3755. The examiner can normally be reached on M-F (9am-5pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on 571-272-3749. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Maria N. Von Buhr
Primary Patent Examiner
Art Unit 2125

MNVB
3/17/05